John E. Newby, P.E., G.E.

Senior Vice President

Education

M.S., Civil Engineering, UC Berkeley, 1976

B.S., Civil Engineering, UC Berkeley, 1976

Registration

Professional Engineer (Civil): Washington, California, and Idaho

Geotechnical Engineer: California

Mr. Newby is a registered professional engineer with 34 years of experience in the geotechnical aspects of civil design and construction. His areas of expertise include soft ground tunnels, static and dynamic foundation design, bulkhead and retaining wall design, slope stability analysis, driven and drilled pile foundation construction, high capacity pavements, earth dams and embankments, dredging studies, and pipelines.

Mr. Newby founded CDM's predecessor firm in the Pacific Northwest (AGI Technologies) in 1983 and managed its growth from a 6-person local office to a 100-person diverse regional geotechnical engineering practice. Since AGI's acquisition by CDM in 1999, he has assisted with CDM's geotechnical engineering strategic development. He is currently responsible for CDM's geotechnical practice in the western U.S, serves as a Geotechnical Lead Practitioner for CDM, and performs peer reviews for geotechnical projects throughout the U.S.

Project Manager, Geotechnical Services for the Brightwater Conveyance System, King County, Washington. Mr. Newby has managed CDM's geotechnical engineering services for predesign, design, and construction of the Brightwater Conveyance System for the King County Department of Natural Resources and Parks, Wastewater Treatment Division since late 2002. The conveyance system consists of over 14 miles of influent and effluent conveyance lines, 5 tunnel portals/shafts, microtunneled influent connections, a large pump station, and a mile-long marine outfall extending to a depth of 600 feet for the proposed Brightwater regional wastewater treatment plant. For the initial project phase, CDM explored, interpreted, and analyzed geotechnical and groundwater conditions to support preliminary design of the deep tunnels and shafts and the marine outfall and to evaluate potential impacts to groundwater systems. The investigation included over 200 exploration borings to an average depth of over 250 feet, geological interpretation, aquifer characterization, in situ and laboratory testing, and numerous pump tests. The second project phase covered CDM's geotechnical and environmental services through final design, permitting, and award of eight construction contracts. CDM prepared the project's geotechnical data report, geotechnical interpretive reports for all project components, and lead preparation of geotechnical baseline reports for each tunnel contract. CDM is currently providing geotechnical services during construction through project completion in 2010 as the third phase of the project.

Task Leader/Lead Practitioner, Regional Connector Transit Corridor, Los Angeles, California. Mr. Newby is task leader for geotechnical, subsurface, seismic, hazardous materials, and construction impact data collection, review, and impact and mitigation analysis to support the EIS/EIR. He also is task leader for geotechnical engineering input to the advanced conceptual engineering related to tunnel excavation, shoring, and monitoring. The

alignment is adjacent to major high rise buildings, utilities, and existing structures and protection of existing facilities is important during construction. Under Mr. Newby's direction, a building evaluation report was prepared that summarized and identified existing foundation, utilities and the potential impact on adjacent structures, as well as data needs for preliminary engineering.

Geotechnical Task Leader, Eastside Extension Transit Corridor Phase 2, Los Angeles, California. Mr. Newby is the task leader for preparation of the Preliminary Geotechnical Engineering report and geotechnical analysis related to retaining walls, sound walls and bridges in support of Advanced Conceptual Engineering for two alternative alignments of an extension of Metro's light rail transit from the Phase 1 service area in downtown Los Angeles to just east of I-605, extending into the City of Whittier. He is also task leader for the Geotechnical/Subsurface/Seismic/Hazardous Materials portion of the DEIS/DEIR. The alignments are a combination of aerial and at-grade construction including a portion of one alignment near the toe of a superfund landfill.

Project Manager, Northeast Interceptor Sewer Tunnel, Los Angeles, California. Mr. Newby was in charge of a geotechnical investigation to support design of the Northeast Interceptor Sewer tunnel. This fast-track project consisted of a drilling program that included over 5,000 feet of drilling, sophisticated field and laboratory testing, and completion of a thorough GDR (geotechnical data report). The project included a 5¼ -mile-long, 7½ -foot-finish-diameter tunnel in soil and weak rock, 4 shafts, and 5-drop structures through the seismically active Los Angeles basin.

Project Director, Harbor Steps Development, Seattle, Washington. Mr. Newby managed and directed an 8-block redevelopment of downtown Seattle over a 20-year period. The project included the demolition, deep excavations, tieback shoring, foundations, and subsurface walls, and construction services for several mid to high-rise buildings. Throughout the project's history, Mr. Newby worked closely with the owner and their various architecture and engineering teams working on each structure. For this project, the regional tectonic model was updated to reflect recent studies of seismicity in regions of subducting plates. Design response spectra were developed to account for site conditions. In addition, an evaluation was made of the liquefaction potential of isolated zones of sands beneath the site.

Geotechnical Project Lead, Harry Tracy WTP Long-Term Improvement Project, San Francisco, California. CDM is designing improvements for water quality and seismic reliability at the Harry Tracy Water Treatment Plant, which serves the San Francisco Peninsula. The plant is located within ½ mile of San Andreas Lake, a feature associated with the San Andreas Fault. Mr. Newby reviewed historic probabilistic and deterministic ground motion studies developed for the site and for other nearby projects in light of the recent Next Generation Attenuation (NGA) relationships and developed recommended design response spectra for both 475-year and 2,475-year

recurrence interval earthquake events. Historically unstable slopes surround the facility and seismic reliability of existing reservoirs and pipelines are a key aspect of the improvement project. John also led CDM's dynamic seismic stability analyses based on a suite of acceleration time histories considering the strong intermediate to long-term period pulse characteristic of near-source earthquake motions to determine the likely deformation of the slopes and design improvements to achieve specific performance criteria.

PROFESSIONAL ASSOCIATIONS

Underground Construction Association (UCA)

Earthquake Engineering Research Institute (EERI)

Association of State Dam Safety Officials (ASDSO)

American Society of Civil Engineers (ASCE)

- Chairman Professional Practice Committee (1983-84, 1992-95)
- Chairman Geotechnical Technical Group (1982-83)

American Council of Engineering Companies of Washington (ACEC WA)

- Board of Directors, Vice President (1990-93)
- President-Elect (1998-99)
- President (1999-2000)

EMPLOYMENT HISTORY

Camp Dresser & McKee Inc.

1999 to Present	Senior Vice President

AGI Technologies

1983 to 2000	President and CEO

Harding Lawson Associates

1982 to 1983	Principal-in-Charge; Bellevue, Washington
1980 to 1982	Chief Engineer; Bellevue, Washington
1979 to 1980	Senior Engineer; Novato, California
1977 to 1979	Engineer; Concord, California

U. S. Geological Survey

1976 to 1977	Research Assistant, Menlo Park, California

Southern Pacific Transportation Company

	1973 to 1975	Assistant Engineer; Oakland, California
	1972 to 1973	Survey Party Chief; Oakland, California
*	1971 to 1972	Surveyor; Oakland, California

PUBLICATIONS

Actual vs. Baseline Tracking during TBM Tunneling in Highly Variable Glacial Geology, 2009 RETC Conference, June 14-17, 2009, Las Vegas, Nevada (co-authored with Ulf G. Gwildis and L.E. Maday)

Establishing Geotechnical Baseline Values for Deep Soft Ground Tunnels, 2008 NAT Conference, June 8-11, 2008, San Francisco, California (co-authored with M.B. Gilbert and L.E. Maday)

Brightwater Conveyance System will Expand Seattle's Wastewater Treatment, Tunneling & Underground Construction Magazine, Volume 1 No. 2, June 2007 (co-authored with M.B. Gilbert and L.E. Maday)

Groundwater Protection - Planning to Avoid Contamination, 1994, 4th Symposium on Geoenvironments and Geotechnics, Osaka, Japan, (co-authored with M. Smith, R.C. Palmquist, M.A. Adams, and S. Higashida)

Groundwater Characterization and Monitoring at a Closed Landfill: A Long Term Commitment, 1994, 4th Symposium on Geoenvironments and Geotechnics, Osaka, Japan, (co-authored with M. Smith, M.A. Adams, and S. Higashida)

Puget Sound Alluvium: A Challenge in Design of Pile Supported Port Facilities with Dredged Slopes, proceedings of ASCE Ports '86 Specialty Conference, Oakland, California, May 19-21, 1986, (co-authored with Jogeshwar P. Singh)

Geotechnical Properties of Northern Bering Sea Sediment, U.S. Geological Survey Open File Report 78408, Menlo Park, California, February 1978 (co-authored with E.C. Clukey and H. Nelson)